

# NORTH CENTRAL REGION HAWK

Vol.2, Issue 6

Civil Air Patrol

December 2003

**To Be Ready, Responsive, and Relevant**

## **SEMPER VI**

### **The Aircrew Responsibility Oath**

As an aircrew on a mission sortie, I promise to.....

- Share responsibility for safety and with expectations to take timely action to prevent unsafe acts.
- Actively participate in the pre-mission briefings to discuss potential aircraft hazards and the emergency procedures that will be followed.
- Monitor all radio traffic and confirm the Pilot in Command has entered the proper frequencies.
- Discuss with the Pilot in Command any concerns regarding the mission.
- Not put pressure on the Pilot in Command to fly into situations that may be unsafe.
- Keep the seat belt and shoulder harness fastened until instructed by the Pilot in Command to unbuckle.
- Keep clear of all controls.
- Avoid unnecessary talk with the Pilot in Command that could distract him or her from providing a safe and stable aerial platform.
- Secure all loose objects while in flight.
- Keep alert for hazards and inform the Pilot in Command the presence of those hazards including towers, power lines, other aircraft, and adverse weather.
- Become another set of eyes for the Pilot in Command to see those things he or she cannot.
- Stay particularly vigilant during the taxi/take-off and landing/taxi phases of the flight for unexpected and potentially unsafe situations.

If the above oath can be adhered to, the aircrew member is on his or her way to becoming a highly capable 'crew dog'.

## **THE ACE FACTOR**

### **Developing Skills to a Higher Level**

Sortie Command for Air Crews and Ground Teams requires good leaders to become better at the operational skills. Training programs are designed to develop a minimum level of training as indicated by proficiency testing and accreditation/certification. The road from mediocrity to exceptional accomplishment requires a commitment to excellence. In most cases, it will require development through a personal plan of action that includes self-awareness and skill building.

The following stages should be followed if you wish to develop your skills to a higher level as a professional in emergency services operations:

### **Stage One: Self-assessment of Strengths and Weakness**

Before you can go from good to great in skill development, you must first conduct a self-assessment of your strengths and weaknesses. Your first level of skill requires enhancing your strengths while making your weaknesses irrelevant to the issue.

- Identify your strengths to the extent that you can, and if necessary have others who are willing to provide honest feedback also assess your talents and skills
- Identify your weaknesses to the extent you can, and if necessary have others who are willing to provide honest feedback also assess your weaknesses for you.
- Begin developing your strengths into skills that you can count on to enhance achievements or success.
- Manage your weaknesses so that they no longer have relevance or negative effects on performance.
- Align your expectations with your strengths.

### **Stage Two: Demonstrate Effectiveness**

The next stage occurs while you are developing your strengths, and managing your weaknesses. At this level you are to demonstrate mastery of your skills in a mission environment. This skill level is where you perform, and it is usually the level where most people stop. When demonstrated competencies become repeated and consistent, mediocrity sets in. Mediocrity in mission operations is the beginning of safety violations and incomplete mission sorties. There must be a motivation to develop skills beyond normal expectations.

### **Stage Three: Develop Efficiency**

The third stage involves going beyond routine expectations. Professionals in emergency services at this level will try to maximize the training effort to determine the limits of training and required procedures. To become efficient with a procedure, it is necessary to thoroughly learn the techniques that make up that procedure. It may also include developing new and more efficient techniques that could change the procedure. While executing his or her mission sorties effectively and safely, the professional will try to do it better with minimum resources and effort. An essential element of this skill level is in knowing when the efficient pursuit of excellence remains the focus, allowing effectiveness and safety awareness to diminish.

### **Stage Four: Seek Perfection**

In this stage, the professionals seek perfection as a motivational means for improvement. In their skill development, they have fine-tuned and developed many of their strengths into combined skills that continue to improve. The professionals at this level will analyze every sortie, asking 'how things could have been done better', and expect higher performance standards from themselves and from their crew or team. Few professionals get to this skill level, as it requires honest self-assessment, maturity, consistency, and the ability to coach others.

### **Stage Five: Continuous Improvement through Team Development**

Throughout the previous stages, the common theme was self-improvement that will take the individual past mediocrity and towards excellence. In order to maintain this continuous improvement, a plan must be established that promotes continuous self-assessment and training at the crew/team level. In order to expand the crew/team performance towards effectiveness, efficiency, and the pursuit of perfection, the sortie commander must act as the trainer, leader and

coach to bring it to a higher level. Careful attention must be made to ensure the effort has a positive effect on mission expectations and performance. A sortie commander, who trains the crew or team, will soon discover that the learning process is the key element in progressive improvement for the individuals within the crew/team. The following is how a sortie commander can keep the crew/team on a track of progressive development and improvement:

- Doing the Right Things- Eliminate non-valued training or waiting around for higher command to initiate the training the crew/team needs. Train the crew/team to the skill levels they need to perform missions as if they were the best. It will be the people in the field that will know how best to improve the skills involved in a sortie. Apply the skills and talents of the crew/team to the right tasks and sorties, when the time is right.
- Do Things Right- In emergency services it is rarely possible to do a sortie over, if it was done wrong the first time. Train the crew/team to do the task right the first time, and apply that education appropriately in future sorties.
- Brief the Plan; Debrief the Effort- It is important that the sortie commander conduct a thorough briefing of crew/team expectations and task objectives prior to training and/or mission operations. It is equally important to debrief the effort following the conclusion of the training and/or mission operations; what was done well, what was done poorly, and ways to improve by building on the strengths and managing the weaknesses.
- Understand Human Limitations- Performance depends on individual effort and how it fits into the crew/team synergy. A good sortie commander will know his or her unit members, as well as they do his or herself. It is important to monitor the effects of fatigue and stress on the crew/team focus and alert factor. It will be important to know how to match the tasks with the skills of each crew/team member.
- Have the Right Resources- Technology can make a tremendous impact on improving skill. The concern is not just in obtaining the technology, but fully understanding how it works and can be applied to mission operations. A good sortie commander will ensure the crew/team has the best equipment, and knows how to use it.

It is important to note that the above stages are not as clear-cut as they appear on paper, nor are they always attainable. Improving skill requires a continuous assessment compared to current standards of performance, and a commitment to excellence.

## **SURVIVAL SENSE**

### **Signaling For Help in the Winter**

If you are stranded in the wilderness in the winter, the more you actively signal, the faster you will be located and rescued. There are two types of signals you can do, audible and visual. A combination of both will greatly improve your chances. Audible signals are in the form of sounds a search team can hear. Three blasts of a whistle, three bleeps from your vehicle horn, or three shouts in succession are international signals for distress. (Special Note: the sound of a whistle can carry 600-800 meters, while a shout usually only 100-200 meters). Visual signals are in the form of contrasting light, color, shape or motion. Reflected light is the most common, but smoke in the daytime and signal fires at night and can be seen for miles, and are often readily investigated to increase your chance for being located. Three fires arranged in a line or triangle is an international signal for distress. Oil and rubber will produce a good black smoke, and green foliage fed carefully to a fire will produce a good white smoke source. The use of a small strobe light in the day or night is highly effective, as it is not usually expected on the ground and will likely be investigated. Be aware that all light sources run by batteries are only as good as the number of available batteries. Keeping extra batteries around is important. Contrasting color, shape and motion are also good for attracting searchers that are relatively close. Setting out contrasting colors in a distinct pattern can be effective, particularly in the form of a 'V' or 'X' (a

recognized signal for distress). Create as much visual contrast as possible, and if you can hear searchers add in motion to assist them.

Your winter signal survival kit should include:

- Whistle
- Signal mirror
- Hunter-orange vest or flag
- Waterproof matches
- High-beam flashlight
- Strobe light
- Extra batteries

## **ALCYONEUS NOW**

### **Behavioral Patterns of Emergency Responders**

In-field operational plans are only as effective as the people on-site who will be expected to carry them out. It is unfortunate, but most operational plans have four in-grained flaws:

1. Initial plans are prepared by mission staff with a singular point of view a considerable distance from the site and conditions the plans will be carried out.
2. Response plans do not take into consideration the situation is likely to change from the time the decisions are made and plans written up.
3. Mission staff decision-making is a traditional management hierarchy process, where decisions are made at mission base following information reporting from the field, with an expected outcome following the decision.
4. Responders in the field are expected to report changes in status to the mission, and await instructions on what to do to counteract the change.

Often the people farthest from the situation are making the decisions. Those on site of the emergency are often told to report and wait before acting. Effective emergency responses in homeland security are now foremost in the public mind. Emergency responders are expected to have a renewed sense of purpose for responding aggressively to meet the public need. Success or failure can depend on the immediate actions taken by an emergency response leader on site.

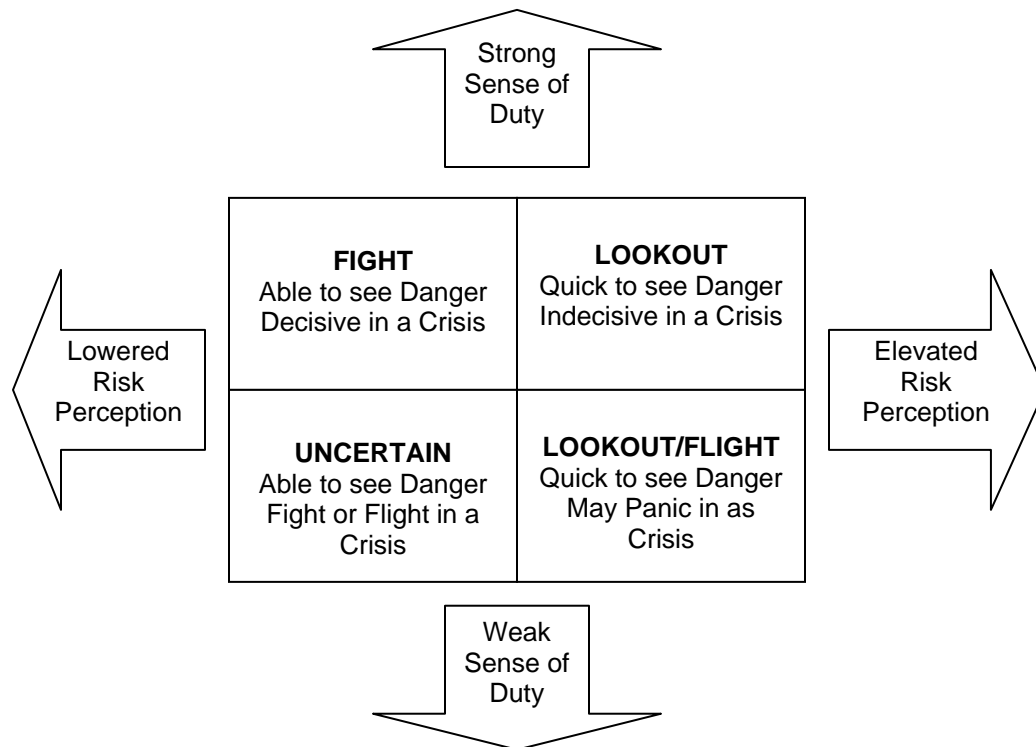
With this new model for first responders, it is important for mission staff to understand and be able to predict the performance patterns of their on-site responders. The difficulty is that knowing a person's tendencies to perform in a routine situation are not always the same in a crisis.

In behavioral research started in 1974 by Carl Aylen, PhD and David Cole, PhD, a 'Duty/Risk Perception' matrix was developed to indicate tendencies of emergency responders in a crisis. 592 respondents of the study were involved in some form of crisis. 469 people were involved in non-life threatening situations, with 123 involved in some form of life-threatening crisis. The 592 members of the study were evaluated by their immediate supervisors to determine how quickly they responded to the crisis, followed by a qualitative assessment of the response. The individuals were asked to determine their perception of risk at the time of the response. The fourth factor for the matrix was the responders' 'sense of duty' as compared to the average person. A 'sense of duty' was described as a 'willingness to help and contribute in times of need, with importance placed on community responsibility'. 'Risk perception' was described as 'their willingness to make decisions and confidence in their abilities to meet the demands of the situation, as well as their tendency to get involved in high-risk activity'.

There are four categories of response indication:

- Strong Sense of Duty with an Elevated Perception of Risk- Quick to see danger, indecisive in a crisis

- Strong Sense of Duty with a Low Perception of Risk- Able to see danger, decisive in a crisis
- Weak Sense of Duty with an Elevated Perception of Risk- Quick to see danger, may panic in a crisis
- Weak Sense of Duty with a Low Perception of Risk- Able to see danger, uncertain whether to fight or flight



Matrix taken from National Safety Council- 'Injury Insights', February/March 2002

It is suggested that where an individual falls within the 'Duty/Risk Perception' matrix is a strong indication of how the individual may behave in an emergency crisis. No assessment process can assuredly predict a responder's handling of a crisis situation. However, with this matrix and an evaluation of the on-site responder's historical actions in similar circumstances, a behavioral tendency may be established. This tendency can support mission staff's reliance on the actions of the on-site responder. It should never be used to predict behavior. Making assumptions about which responder can handle a crisis can be misleading. Previous experience and behavior in a different scenario may prove irrelevant in the current situation. At best, mission staff should only use this matrix to anticipate possible behavior of the responder, allowing more decisions to be made on-site.

## CREW'S CONTROL

### Human Error

In emergency service missions there is considerable information that is processed by staff, crews and team. During any mission, interactions and communications between each group creates the potential for human error. As much as we do not like to admit that it happens, human error is normal and should be expected.

There are four levels of human error:

- Slips
- Mistakes
- Errors
- Mishaps

**Slips-** Slips are most often the result of miscommunication, not sending information correctly, or not receiving the correct information. Slips are the auditory or visual form of human error. They can be caused by habit, over-sight, confusion, or as a result of being under stress. In mission operations, a slip can never be regarded as insignificant. A slip could come in the form of a misstated radio frequency or writing down the wrong coordinates. We all experience 'slips' during mission operations.

- Corrective Action- If a slip is discovered, inform the individual regardless of rank but do not take issue with it or make it seem as a flaw in character.

**Mistakes-** Mistakes are usually failures in planning. A mistake could be made because incorrect action was taken based on a slip. It has more to do with conflicts in planning without proper communication. Mistakes are usually the result of not allowing enough time to complete assigned objectives.

- Corrective Action- Thorough planning and cross-team coordination in support of a tactical plan of action can limit mistakes. Also, assigning an individual to monitor plans in support of the strategic objectives can reduce the potential for mistakes.

**Errors-** Errors are poor execution or improper actions based on information. The errors could be a result of proper actions based on incorrect information, or improper actions based on correct information. Errors can be a result of a slip and/or a mistake. Because errors are actions, they are more serious than slips and/or mistakes.

- Corrective Action- All forms of communications, plans and actions are monitored for accuracy by a double-check system. When an error is detected it is to be dealt with assertively, with others in the decision-making chain alerted to the problem.

**Mishaps-** Mishaps are a result of errors going unchecked and causing an incident, accident, or a process breakdown leading to a mission failure. Because a mishap can be considered a mission failure, they are the most serious form of human error.

- Corrective Action- Procedures, checklists, and regulations can be implemented to control many known mishaps, but they will never stop all mishaps from occurring.

### **The Mishap Cascade**

In mission operations there are no such thing as insignificant human errors. An over-sight or slip that is considered insignificant can lead to mistakes. The mistake that is not caught or corrected immediately can lead to an error or a series of errors. Any error that goes unnoticed can lead to a mishap and ultimately to mission failure.

- Corrective Action- All members of an emergency services operation must be able to quickly identify all levels of human error and take swift corrective action.

## **CARRYING THE FIRE**

### **Finding Your Marketing Niche**

There are three strategies for a successful service-oriented operation: good promotion, good service, and good customer relations. Niche marketing requires creative specialty and value added marketing techniques.

When you go to a potential client you must be able to differentiate your 'product' from others, by adding a special value to what you offer. There are a few ways to add value:

- Build your relationship with the customer over time. Good marketing is about building trust and personal loyalty in the relationship. Customers who can identify with an emotional bond are likely to remain loyal.

*An initial face- to-face meeting with potential clients is more productive with a better opportunity for use, than by a flyer sent to the customer's office or by a telephone call. Routine follow-up visits with the customer will enhance the relationship.*

- Stay on top of technology and how it will fill the customer's needs. Your best service will never be used if it does not fit the needs of the client and represent effective operations.

*'We do not just provide ground and aerial damage assessment sorties. We also provide live-time video assessments and digital photo transmissions of property damage from many miles away.'*

- Educating the customer is a major part of selling your operational programs. Providing them with a brief operational history of the Civil Air Patrol is not a bad way to indicate the dedication we attach to an excellent service.

*'The Civil Air Patrol has been involved in emergency services for over 60 years, with the experience of 63,000 members nation-wide to provide the professionalism needed to conduct successful operations.'*

- Your operations make for a better 'sell', if you can tout diversification and a range of offered services. All too often, we sell based solely on how cheaply our planes can operate. Never forget we are a combined force operations, providing air and ground response teams supported by the best communications network around.

*'Not only can we provide damage assessment, but we also have highly trained ground teams and aircrews to meet your needs that can transmit high resolution digital photographs from on-site to your EOC in minutes through our communications network.'*

- Provide an added value to your service. Something that will make your service stand out in the crowd.

*'We can provide aerial reconnaissance at a cost of \$92 per hour of use, compared to the cost of \$1500 per hour for the use of a helicopter. Our ground teams are also trained 'adverse weather spotters', along with their ability to assess damage. We can provide a complete and versatile emergency response team in the air or on the ground within a couple hours of a request, supported by the finest communication network in the area.'*

- Promotions and publicity help increase your visibility to your potential customers. Never forget to get publicity for any activity you do, even if it is just a training exercise.

*This past weekend, units of the Civil Air Patrol participated in a disaster response exercise to test and refine their emergency response techniques involving the consequence management of a simulated tornado in the community. Over 90 members from around the state participated in the daylong activity.....*

## **MISSION READY**

### **Search Planning Part 1- Probability of Containment**

There is a new concept in search planning and tactical operations that will soon be introduced by the Air Force Rescue and Recovery Center. In the as yet to be determined future, they will be

requesting and discussion of the “Probability of Success” or called ‘POS’. The POS is a product of the Probability of Containment (POC) and the Probability of Detection (POD), which has also been modified. This and future issues will try to explain these new concepts to ensure a smooth transition to this system of reporting.

In search planning for an overdue aircraft, it is important to establish an initial probability of containment. The National Search and Rescue School in its ‘Inland SAR Planning Course Book’ (revised December 2001) describes the probability of containment (POC) as “the probability that the search objective is contained within the boundaries of an area, sub-area, or grid cell”. Search planners would like to project a 100% POC with every mission, stating with absolute certainty that the search objective is located within their projected search area. This is an ideal planning declaration, and although a 100% POC is strategically sound, it may not be tactically feasible or prudent. A plane flying at 100 nautical miles per hour (knots), with four hours of available fuel can fly a conceivable distance of 400 nautical miles from the departure point. In order to achieve 100% POC, the search area would be over 502,000 square nautical miles. With time working against the potential victims of aircraft in such a situation that may have crashed, that would expend a lot of resources to adequately search such an area. Even if you would know the general direction the aircraft may have taken, your probability of containment could still be between 125,000 – 250,000 square nautical miles. Such an area is still formidable to search in the next 24-48 hours, which are the most critical to the victims of an aircraft mishap. What a search planner needs to determine the POC, is information from the field relating to who ever saw the aircraft last, to establish a last known position relative to the departure point and destination. A method must be used to shrink the search area down to a manageable level for available resources to search in the initial stages of the mission, while maintaining a high percentage POC.

The search planner must establish a POC that is large enough to likely contain the search objective, while still small enough to be searched quickly and effectively. The Canadian Department of National Defence conducted several studies of air distress cases between 1974 and 1987. In the 1987 publication of ‘A New Search Method Based on an Analysis of Air Distress Cases’ by P. H. Saunders, the following statistics were discovered for overdue aircraft located between the Last Known Position (LKP) or Departure Point and the Destination Point:

#### **Probability of Offset from Centerline**

1 nm	12.4%	6 nm	65.3%	11 nm	79.7%
2 nm	24.8%	7 nm	68.7%	12 nm	80.5%
3 nm	37.2%	8 nm	72.1%	13 nm	81.3%
4 nm	49.6%	9 nm	75.5%	14 nm	82.1%
5 nm	61.8%	10 nm	78.9%	15 nm	82.9%

>15 nm add 1% per 5 nm off-set

These numbers were validated by a comparable study conducted in 1999 from locations in the U.S. by John Desmarais of CAP's National Headquarters Staff.

It appears that the optimal search area on either side of a centerline from the LKP to the Destination Point is between 5 nm to 10 nm offset.

The data from the Canadian Study (validated by John Desmarais' similar findings in 1999) also indicated a probability along the track between the LKP and the Destination Point. If the flight paths were extended 10 nm either side from the LKP and Destination point, overdue aircraft were located as a percentage of the overall flight path as follows:

#### **Percentage of Projected Flight Path +20 nm      Percentage of Projected Flight Path +20 nm**

20% of Track	21.1% located	60% of Track	46.1% located
40% of Track	35.5% located	80% of Track	67.1% located
50% of Track	38.2% located	100% of Track	97.4% located



It appears that the optimal search areas along the track is the first 20% and the last 40% of the track, with the highest percentage of aircraft locations within the first 20% of the track from the LKP (21.1% located) and the last 20% of the track from the Destination Point (30.2% located).

In order to determine a logical search area with a high POC, the search planner needs to look at the calculations for area, which is length multiplied by height or width. The only difference is that this calculation is based on a percent probability that the search objective is in the selected search area.

$$\text{POC (\%)} = \text{Probability of Offset (\%)} \times \text{Probability Along Track (\%)}$$

If the search involves a route search along a track, using an offset perimeter of 5 nm, and the search will be the entire route plus 10 nm at the LKP and another 10 nm at the Destination point, the following calculation from the charts would apply for the POC%:

$$61.8\% \times 97.4\% = \text{POC of } 60.2\%$$

If the offset search perimeter were extended to 10 nm over the same route, the calculation would be as follows:

$$78.9\% \times 97.4\% = \text{POC of } 76.8\%$$

An offset of 15 nm would produce a POC of 80.7% (82.9% X 97.4%). The wider you extend your search perimeter offset, the higher your POC will increase. That increase in offset also increases your search area that requires more time for searching. The search planner must balance mathematical calculations against tactical operations to determine the best offset to use.

It is important to note that such calculations for POC are not absolute, and is only a statistical analysis of a crash site location relative to an intended track based on historical information. The POC is to be applied as an initial search plan when little is known, except for a Last Known Position, Intended Track, and Destination. It does not assume subjective information that is used later on in search planning, such as; pilot intentions or habits, weather, terrain, or any reason a pilot would deviate from a flight plan. POC is a first best guess to begin a quick search when very little information is known. It is also important to say that such calculations based on a limited historical database are not as accurate enough to say that a 74.2% POC is greater for tactical operations than a 73.8%. With all the variables involved, it is best to round the numbers to the nearest whole number, and realize that a 74% POC is only marginally better than a 68%, and when associated with other tactical concerns, a 68% POC may be a better choice to use. Future issues will discuss tactical concerns further. There is no practical search method that can ensure a 100% POC. Tactical operations are based on searching an area in a reasonable amount of time, with a reasonable chance for success. For every 77% probability the search objective may be in the established area, there is a 23% probability the search objective may not.

Part II of this series will discuss the updated version of 'Probability of Detection' and how it relates to the 'Probability of Containment', leading to a 'Probability of Success'.

## **GOING FROM GOOD TO GREAT**

### **The 'Hawthorne Effect' for Motivation**

There are two ways a human can improve performance, through pressure or motivation. Any leader that states they can "motivate" someone else to perform is actually saying they can apply pressure so that person performs. As stated, that is external pressure, not motivation. Motivation is internal, and it is not something someone gives to another. Nor, is it something someone else does to a person. In 1927, the Western Electric Company of Hawthorne, Illinois experimented to see how certain working conditions could affect production. The first experiment started with the lighting being improved in one shop, while the lighting in another shop remained the same. The outcome of the experiment was that the workers in the shop with the improved lighting increased production from that before the change. But, they also found the shop that had no change in the lighting also improved production. In the next experiment, the lighting was decreased in another

shop. That group also increased production from that before any change. Researchers speculated that it was the attention paid to the workers, and not the amount of lighting that increase their production. Just knowing that someone in management was carrying to improve their working conditions, gave them attention. The company had made them feel important and they responded by working harder. This is referred to as the 'Hawthorne Effect', and it is the basis for motivation.

Everyone is motivated. Everyone works hard at something. It is only a matter of tapping into whatever it is. Motivation is the internal fire that each person has. It is up to the leader to get that motivation working hard on the right thing, at the right time.

In emergency services operations, the responders are our most important asset. You, as an emergency services leader, are nothing without them. They are your tools for success. It will be how you work with those tools that will determine the relative success of a mission. We are lucky in our operations because we work with volunteers. They are already motivated to do the right thing, at the right time, or they would not be volunteering to do what we are asking.

There are certain things leaders can do to promote the motivation for doing the right thing, at the right time:

- Provide Direction- Set attainable, specific, and clearly defined goals.
- Send Clear Messages- Let them know that they and the job they do are important.
- Believe they are Unconditionally Important- Ask for their input, and listen to them when they talk.
- Give Responsibility- The ultimate form of believing in someone and making them feel important is giving them responsibility.
- Provide Opportunity for Success- Give them the chance to succeed with their responsibilities.
- Praise them- Praise is always welcome, and seldom (if ever) questioned. It ties in well with responsibility and opportunity.
- Demonstrate Faith- Have faith in yourself and in others. People can always do more than they think they can, when someone demonstrates faith in them.
- Lead by Action- Action speaks louder than words. Most people have a finely-tuned BS-meter that can see through words that lack heart.

Motivation is a simple concept. Never quit, never give in, and make sure those around you have ample opportunity to succeed. Let them know that they can do anything they want to succeed, except get discouraged and quit.

## **THINGS I NEVER LEARNED FROM THE REGULATIONS- Comments from the Field**

There should be a regulation covering how to make good coffee at a mission base. MNWG

## **DID YOU KNOW?**

### **The New Madrid Fault**

The New Madrid Fault System extends 120 miles south of the area of Charleston, Missouri and Cairo, Illinois down through Marked Tree, Arkansas. It crosses five state lines, cuts across the Mississippi River in three places and the Ohio River in two locations. It is an active seismic zone, averaging more than 200 measured events per year registering 1.0 or greater on the Richter scale. Earthquake tremors of 2.5 to 3.0 are experienced annually. About every 18 months there is

a seismic event that releases a shock of 4.0 or greater. About once per decade there will be an event of 5.0 or greater, which can cause significant damage.

Although there are more frequent seismic events along the west coast, the events registered from the New Madrid Fault are more intense and can cover an area about 20 times larger. An earthquake of a shock of 6.0 or greater occurs about every 80 years, with the last one of that magnitude occurring in 1895. A major earthquake of an estimated magnitude of 8.0 or greater occurred in 1811-12. There is a projected 3% probability for an event of this magnitude by the year 2040. An earthquake with a magnitude of 7.0 to 8.0 has a projected 10% chance by 2010 and a 25% chance by 2040. An event with 6.0 to 7.5 reading has a 50% chance by 2010 and 80% chance by 2040. A New Madrid earthquake of a 7.6 or greater magnitude would be felt from the Rocky Mountains to the Atlantic Coast of the United States, with major damage expected in 20 or more states. With the current monthly activity, there is no doubt in the mind of geological experts that another such event along the New Madrid Fault will occur within our lifetimes.

### **CHECK IT OUT!**

If you do not know much about consequence management in terrorism, this is the website to check out. It is tough and intensive, but I can assure you that you will learn all there is to know to become a better emergency responder or manager in the aftermath of a terrorist attack. Following completion of the downloadable course, you can submit you self-test exam to FEMA and with a 70% or higher grade, you will receive a certificate of completion.

<http://www.usfa.fema.gov>

'FEMA/USFA/NFA: Emergency Response to Terrorism'

### **Words of Wisdom- Coffee Cup Leadership Advice from the Military Pros**

There is a difference in doing your job and doing your duty.

Some days you get to eat the bear. On other days the bear eats you.

Leadership is the art of accomplishing more than management says is possible.

A trooper in the field sitting on his horse is happier than standing guard at the post. (from an old U.S. Cavalry saying)

### **FAMOUS QUOTES**

If you let someone else define the terms of battle, it isn't much fun. (Gen. William T. Sherman)

### **SUBMISSIONS**

Queries, suggestions, and news items are welcome. Please submit to the following addresses:

Mail: Bruce Marxsen  
5231 Topaz Crt.  
Lincoln, NE 68516

E-mail: dos@ncr.cap.gov

The next issue of the 'North Central Region Hawk' will be sent out on or about 15-Feb-2004. Please have information you would like to be considered in that issue to my attention no later than 01-Feb-2004.